



SB 1 Would Make Young Workers Pay for Politicians' Mistakes

Retirement benefits below many private 401(k) plans would make it hard for schools and agencies to retain high-quality staff

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KRC Pension Primers: As policymakers, members of the media, and citizens evaluate pension proposals, the Keystone Research Center's (KRC's) "pension primers" seek to demystify the often-complex details of the pension debate. This is pension primer #14.

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Gov. Wolf has indicated his willingness to modify pensions for future Pennsylvania public sector workers by using a variant of the "stacked hybrid" design proposed in 2013 by Pottsville Republican Rep. Mike Tobash. Negotiations of a compromise pension deal, however, remain stalled because Senate leaders remain committed to their own redesign of Pennsylvania pensions, SB 1, passed by the legislature at the end of June but vetoed by Gov. Wolf.

One criticism of SB 1 has been that, even with improvements proposed by Senate leaders, SB 1 would cut benefits by up to two thirds for career workers. This would leave three of six career workers examined by the actuary for the school employees' pension with annual benefits of less than \$10,000.

This brief offers a new perspective on the adequacy of SB 1's benefits by comparing them to (a) those provided by typical private sector 401(k) plans; and (b) other public sector benefits across the country.

While private 401(k) plans have their own problems in terms of retirement security – in part because of their low returns and high costs -- SB 1 would do even worse. In fact, SB 1's benefits would be about 15% to 16% lower than with a typical private sector 401(k). SB 1 achieves benefits even lower than many private 401(k) plans for a simple reason: a substantial portion (36% to 40%) of the contributions to SB 1 retirement accounts are forced into "cash balance" accounts that, by design, deliver low returns for the employee. This allows the pension systems to skim excess returns (over and above the amounts credited to employees' accounts) to help pay down the state's unfunded pension liability. In effect, SB 1 steals from younger workers to pay down unfunded liabilities that resulted from policy mistakes made by politicians since the early 2000s.

Retirement benefits under SB 1 would also be low compared to other public sector plans. In fact, we find that SB 1 would give future, young Pennsylvania school and state employees THE lowest retirement benefits of ANY large public sector plan in the nation.

Despite artificially repressing returns to young employees' CB retirement accounts, SB 1 does not save significant funds with its new pension plan redesign. SB 1 savings come instead from reducing benefits for existing employees, partly in ways that may be ruled unconstitutional by the courts.

The lack of savings from pension plan redesign for new workers under SB 1 reflects two factors:

- Pennsylvania's pensions for new workers are already dirt cheap as a result of the changes made in 2010 – less than 3% of salary for the biggest pension plan which covers school employees (the Public School Employee Retirement System (PSERS));
- the inefficiency of the new SB 1 DC and CB savings accounts, which results from their likely low returns and, for DC accounts, high costs. By stealing from young, new employees, SB 1 provides them with low benefits; but, the actuaries for Pennsylvania's pension systems found, SB 1 pension plan redesign does not steal enough to produce meaningful savings for taxpayers.

College-educated public employees in Pennsylvania, including teachers and public agency professionals and managers, already have salaries that are more than 25% lower than private-sector employees with the same level of education. Making pension benefits inferior to the private sector as well would make it difficult for schools and state agencies to attract and retain high-quality and experienced staff. Non-competitive compensation is also likely to require higher wages in the future than with the existing DB pensions, another taxpayer cost.

In sum, SB 1 is a “three strikes and you’re out” pension proposal – harmful to public employees, taxpayers in the long run, and to schools and state agencies as employers. On policy grounds, SB 1 should be a non-starter.

Benefits for New Employees in the Revised Senate Bill 1

The focus of this brief is on the retirement benefits for new employees under SB 1 as revised in Senate Republican proposals made public in August.

For employees hired in 2016, SB 1 replaces the current defined benefit pension with a combination of a 401(k)-style defined contribution (DC) plan and a so-called cash balance (CB) plan.¹

(a) The Defined Contribution (DC) component of the revised SB 1. Under the revised SB 1, employers would contribute 3% to the DC accounts of new Public School Employees' Retirement System (PSERS) members, up from 2.59% in the original SB 1 and 4% to the DC accounts of State Employees' Retirement System (SERS) members. Employees in both systems would contribute 3% to their DC accounts.

(b) The Cash Balance (CB) component of the revised SB 1. The cash balance accounts of SB 1 would be established as a new “tier” within the existing DB pensions. Employees would contribute 3% to this plan and employers 1% (up from zero in the original SB 1). Employees would be guaranteed an interest credit each year on their cash balance account of the lower of 4% or the current interest rate on 30-year Treasury bonds (which has ranged between 2.25% and 3.25% this year²). From 2019 forward, employees may also be credited with up to half the pension plan investment earnings the previous year in excess of the assumed rate of return (currently 7.5%). Employees, however, only receive portion of this additional interest – to be precise, a portion equal to the ratio of the total amount of funds in all member cash balance accounts divided by each pension system’s liabilities. For the first couple of decades, this ratio will be small because system liabilities will dwarf the total of funds in cash balance accounts. In effect, employees will receive little interest-rate sharing and will only receive the lower of 4% or the 30-year Treasury bond rate.³

Benefit Cuts of Up to Two Thirds for Young Workers

The PSERS actuary, Xerox, estimated the impact of the original SB 1 on future benefits for six sample career employees with 25 to 35 years of service, five retiring at 65 and one retiring at 57.⁴ The estimated cut in benefits compared to Act 120 ranged from 69% to 72%. The PSERS actuary projected that three of the six career employees would have annual benefits of less than \$10,000, another would receive only \$10,602, and no retiree would receive benefits of more than \$20,000.⁵

The Pew Trust has also reported estimates of benefit cuts under SB 1, in its case for SERS employees.⁶ Pew finds that cuts for two career employees would range from 32% to 57% depending on the rate of return assumed for the SB 1 DC plan – an average of about 45% if you pick the middle of the range. Pew’s actuarial models find that the benefit “...reduction is greater still for PSERS plan participants.”⁷

While actuarial studies have not been published for the revised SB 1, the improvements in benefits compared to the original are modest – roughly 10%.⁸ Instead of benefit cuts of 70%, therefore, there would be benefits cuts of roughly two-thirds (67%) for the six career employees modelled by the PSERS actuary⁹ and of about 40% on average for the SERS career employees modelled by Pew. Three of six career employees modelled by the PSERS actuary would still have a pension of under \$10,000 and all six would have a pension under \$22,000.

Benefits Inferior to Private 401(k) Plans

In recent debates over pensions, critics of traditional DB public pensions often suggest that these plans are “too generous.” These critics like to point to 401(k) plans in the private sector as a more affordable option – although these are only more affordable if employers contribute a low percentage of pay (and thus offer a low retirement benefit). (Private 401(k) accounts are an expensive way to deliver a decent retirement benefit because they have low investment returns and high costs: as a result, it can cost nearly twice as much to provide a given retirement benefit with 401(k)s as with a pooled public DB plan.¹⁰)

How would SB 1 retirement benefits compare with a typical 401(k) private plan, acknowledging that the latter ordinarily provide inadequate retirement security?

To make this comparison, we compare the benefits for three different career employees (a typical teacher, a typical education support staff person and a typical state agency professional) who each start

their career at age 27 and retire with 35 years of experience at 62. We assume the employee contributes into the 401(k) plan the same amount as PSERS and SERS employees would contribute to their retirement under SB 1 – a total of 6% of salary. We also assume the same level of total employer contributions into the 401(k) plan as under SB 1 – 4% of salary for the two school employees and 5% for the state employee. This means total employee plus employer contributions equal 10%-11% of salary. These levels of employee and employer contributions are typical of many private sector plans.¹¹

Our other assumptions in comparing SB 1 retirement benefits with a typical private sector 401(k) are based on those made by the PSERS actuary in computing SB 1 benefits to Act 120 benefits. For the 401(k) plan and for DC portion of SB 1, we assume a 6% rate of return. For the CB plan we assume a 3% rate of return. With these assumptions, we find that the SB 1 benefit is roughly 15% to 16% lower than with typical private 401(k)-type plan. (14.86% lower for the SERS employee, 16.12% lower for the teacher, and 16.5% for the education support staff person).¹²

The reason why SB 1 delivers inferior benefits even to a standard 401(k) plan is straightforward: a substantial portion of contributions to new employees' retirement plans (i.e., 4% of salary – 36% of total contributions for new SERS members and 40% for new PSERS members) go into the CB accounts which, by design, deliver low returns for the employee. This allows the excess returns (over and above the amounts credited to employees' accounts) to be skimmed off to help pay down the state's unfunded pension liability. (Formally the cash balance accounts form a new "tier" within the existing defined benefit pensions, with the contributions to CB accounts co-mingled and invested with other DB pooled savings.) In effect, SB 1 steals from younger workers to pay down unfunded liabilities that resulted from policy mistakes on pensions made by politicians since the early 2000s. First and foremost, Pennsylvania failed to make contributions required annually to maintain plan funding levels, ranking 49th in the country for the share of required contributions made.¹³

The Lowest Public Sector Benefits in the Country

Another point of comparison for SB 1 is other public sector benefit plans. As shown in an earlier brief, Pennsylvania already has modest pensions compared to other defined benefit public pension plans. Out of the 100 biggest public pension plans in the data base maintained by the National Association of State Retirement Administrators (NASRA), Pennsylvania's pension plans for state and school employees rank low for generosity (77th and 89th, respectively) because they provide no protection against inflation (unlike Social Security and two thirds of other public pensions) and because the level of employee contributions is higher than average.

Where would Pennsylvania public sector employees' retirement benefits rank if SB 1 were enacted? They would probably be lower than any of the largest 100+ public sector retirement plans. Here is the basis for this claim.

- One comparison group is the 100 biggest public sector DB (or hybrid) plans in the NASRA data base (the 98 biggest once we remove Pennsylvania's PSERS and SERS existing DB plans). All of these 98 plans have a DB plan with at least a 1% multiplier. This by itself ensures benefit levels above those provided by SB 1 (even without considering the additional benefits provided by the DC portion of hybrid plans).

- The only large public plans not included in the NASRA data base (as of late 2014) are straight DC plans and a few hybrid and cash balance plans created since 2012. Table 1 profiles nine additional plans identified.
 - All of the hybrid plans have a DB component that by itself would deliver higher benefits than SB 1.
 - Both of the DC-only plans have employer contributions potentially equal to or above the total employer contributions proposed for SB 1. In addition, these two plans do not put any of the money into a CB plan with artificially low interest credits into employee accounts.
 - The CB-only plans all offer superior terms (i.e., higher employer contributions and/or higher investment returns) than the CB portion of SB 1.

In sum, based on this evidence, it appears that SB 1 would give Pennsylvania the lowest retirement benefits of any large major public sector pension plan in the country.

Table 1. DC and Hybrid Plans in Other States Offer Employee Contributions and Benefits Superior to SB 1			
Plan	Plan Design	Employer Contribution	Employee Contribution/Other Plan Characteristics
Alaska PERS/TRS ^a	DC	PERS: 5%; TS 7%	
Michigan state employees ^b	DC	4% mandatory plus 1:1 match for first 3% employee contributions; max. employer contribution = 7%	
Utah ^{c,d}	Option of DC or hybrid	10% to DC plan (12% for public safety and firefighters). Up to 10% for hybrid plan.	1.5% DB multiplier. After employer contribution, employees cover DB ARC. If DB employee contribution < 10%, difference goes into employees' DC accounts
Tennessee ^c – exc. local gov.	Hybrid	5% to DC and target contribution of 4% to DB	The DB plan provides a 1% multiplier. Employee contributes 5%
Virginia ^c	Hybrid	DB contribution based on ARC. DC employer match 1:1 up to 2% & 50% match for next 3% (max. employer DC cont. 3.5%)	The DB plan provides a 1% multiplier and the employee contributes 4%. DB plan includes COLA capped at 3%. Employee must contribute 1% to the DB.
Michigan schools ^c	Hybrid	ARC to DB plan. Up to 1% to DC (50% match up to 2%).	DB 1.5% multiplier. Employees contribute 6.4% to DB, mandatory 2% to DC.
Nebraska state ^e	Cash Balance	7.49%	Employees put in 4.8%. Guaranteed interest rate credit of 5%
Kansas ^e	Cash Balance	3-6% depending on years of service (3% for 1-4 years up to and 6% for 24+ years)	Employees contribute 6%. Guarantee interest credit of 5.25% with possible additional dividends if investment returns warrant.
Kentucky ^e	Cash Balance	4%	Employee contributes 5%. Guaranteed interest credit of 4% + 75% of net investment return in excess of 4%

^a http://www.fascore.com/PDF/alaska/plan_highlights_98214-04.pdf

^b https://stateofmi.voya.com/einfo/pdfs/forms/michigan/welcome_guide.pdf

^c Alicia H. Munnell, Jean-Pierre Aubry, and Mark Cafarelli, "Defined Contribution Plans in the Public Sector: An Update," State and Local Pension Plans #37, Center for Retirement Research at Boston College, April 2014, online at http://crr.bc.edu/wp-content/uploads/2014/04/SLP_37.pdf

^d <https://www.urs.org/mango/pdf/urs/Miscellaneous/tier2FAQ.pdf>

^e Stephen Herzenberg, "Cash Balance Plan Could Hurt Public Employees and Taxpayers," KRC pension primer #8, Keystone Research Center, Harrisburg, October 1, 2013; online at <http://keystoneresearch.org/issues-guides/pensions>

SB 1 Would Make PA Public Sector Compensation Non-Competitive: It Could Lead to Severe Shortages of Teachers and State Agency Professionals and Managers

Employer personnel costs are not determined by benefits alone – in fact, retirement benefits are typically a small part of total compensation costs, far below salaries and usually well below health-care costs. As a result, what matters to employers, public or private, is not the cost of retirement benefits alone – or any other single component of compensation – but of the entire compensation package.

When we look at the total compensation package in Pennsylvania, we find that public sector workers already cost less than their comparable private sector counterparts. In fact, a 2010 study found that controlling for other factors that influence compensation – most importantly, education – earn 5.4% less than private sector workers in annual compensation.¹⁴ For college-educated employees (more than half (53%) of Pennsylvania state and local public sector employees), including teachers and other professionals and managers, public sector compensation trails private sector by much more. As the study cited in end note 14 says (p. 6):

Pennsylvania state and local workers with a bachelor's degree make, on average, 27% less in salary and receive 21% less in total compensation than those in the private sector. There is an even greater gap for workers with master's and professional degrees: In state and local government, workers with a master's degree earn 34% less in salary and receive 29% less in total compensation than in the private sector, while those with a professional degree earn 59% less in salary and receive 57% less in total compensation.

Given the amount by which public sector compensation already trails private sector among college educated employees, if the goal is to decimate the quality of public schools and of the services provided by state agencies, SB 1 would be an excellent tool for accomplishing that goal. This is partly because SB 1 would cut benefits deeply, growing the overall public-private compensation gap. It is also because of the structure of the cash balance plan, which leads to artificially low returns for public employees on over a third of the total (employee plus employer) contributions to their retirement plans. SB 1 would not simply take away the current (DB) pensions which provide Pennsylvania public employers with a powerful retention device. By stealing from future workers to pay down the pension debt, it would create a powerful incentive for mid-career professionals and managers to leave for private sector jobs with 401(k) plans that do not have artificial caps on earnings.

Already in other states, there are signs of emerging teacher shortages as the economy recovers and as more current or potential future teachers elect for higher salaries and compensation in private jobs.¹⁵ These signs are attenuated so far in Pennsylvania because of the 33,000 layoffs of public school employees since the 2011 education funding cuts. But the same shortages would likely appear in Pennsylvania with implementation of SB 1. Consistent with this possibility, the number of education majors at main teacher training schools (the Pennsylvania State System of Higher Education schools) is today substantially lower than the level of 2003.¹⁶

Three Strikes and You're Out: SB 1 Would Hurt Public Employees, Taxpayers, and the Quality of Schools and State Services

When you examine closely the facts regarding SB 1, it becomes clear that no one should support this pension redesign on policy grounds.

The campaign to eliminate Pennsylvania's existing DB pensions has been waged over the past few years in the name of taxpayers. Yet SB 1 does not provide any additional funds for this year's Pennsylvania budget. As shown in Figure 1 of KRC pension primer #12, moreover, SB 1 also does not pay down Pennsylvania's pension debt faster than Act 120 – even with savings from cuts in the benefits of current employees which are likely to be rejected by the courts.¹⁷

The only rational argument advanced for SB 1 is that it would reduce taxpayer risk of future unfunded liabilities. When you examine the details, however, you find that SB 1 exchanges a risk of future increases in costs (from new unfunded liabilities) for a virtual guarantee of future increases in costs. These increases are virtually guaranteed because SB 1 combines inefficient retirement savings plans with deep cuts in benefits that will likely necessitate future increases in wages.

Rather than eliminate Pennsylvania's efficient pooled DB pensions for young employees, Pennsylvania should seek to mitigate taxpayer risk by building on the risk sharing provisions of Act 120 – as proposed by both SB 1 and Gov. Wolf.¹⁸ Building on this area of consensus and setting aside a pension proposal that would hurt public employees, taxpayers and the quality of schools and other public services in Pennsylvania is the best route forward for Pennsylvania public sector pensions.

END NOTES

¹ For more background on cash balance pension plans, see Stephen Herzenberg, *Cash Balance Pension Plan Could Hurt Public Employees and Taxpayers*, Keystone Research Center, October 1, 2013; online at <http://keystoneresearch.org/publications/research/cash-balance-pension-plan-could-hurt-public-employees-and-taxpayers>

² 30-year Treasury rates are available at <http://www.treasury.gov/resource-center/data-chart-center/interest-rates/Pages/TextView.aspx?data=yieldYear&year=2015>

³ The Pew Trusts also note the SB 1 CB interest rate crediting “provision would divert some of those [additional] returns to pay for the existing unfunded liability - a transfer from these future hires into the state coffers, resulting in an expected return for employees of closer to 4% in the early years.” As noted later in the body of this brief, the PSERS actuary regards 4% on the SB 1 CB accounts as optimistic and assumes instead a 3% rate of return. In the very long term if SB 1 was implemented – about 50 or 60 years from now – most of the systems’ DB plan liabilities would be associated with the CB accounts and employees would in fact receive half of any investment earnings over 7.5% (or over whatever is the assumed rate of return). However, those in the new CB tier for the first 10-20 years will not receive much of these returns. Pew Charitable Trusts, “Pension Policy Alternatives to Senate Bill 1: Attachment 1 – Amendments to Senate Bill 1,” June 19, 2015, p. 2.

⁴ David L. Driscoll, “Letter to PSERS Executive Director Glen Grell Re: Draft Senate Bill No. 1,” May 6, 2015; p. 54 of PDF online at https://rlws.sers.pa.gov/apex/f?p=146:15:26855372515404:::P15_HIST_LEG_KEY:3079

⁵ Xerox did these estimates by asking the question: if SB 1 had been in effect for decades, what would be the benefit be of a career employee retiring now, with the age at hire, termination, and retirement shown in Table 1 Keystone Research Center, “Senate Proposal Goes Backwards, Not Forwards, On Pensions,” Harrisburg, June 3, 2015, online at <http://keystoneresearch.org/pensions>.

⁶ Pew Charitable Trusts, “Summary of Analysis and Recommendations: SB 1 and Governor’s Pension Proposal,” May 21, 2015. The figures reported here are based on Pews’ estimates of benefit changes under SB 1 and are on reading figures off a graph.

⁷ Pew Charitable Trusts, “Summary of Analysis and Recommendations: SB 1 and Governor’s Pension Proposal,” May 21, 2015, p. 2.

⁸ Total contributions to SERS increase by a tenth (from 10% of salary to 11%); this increase goes into the CB plan, which has lower returns than the DC plan. Therefore the improvement in SERS benefits would be slightly under 10%. For PSERS members, benefits might go up by slightly more than 10%: total contributions increase by about a sixth (17%) (from 8.59% to 10%) with one percentage point going into the lower return CB plan and the other 0.41

percentage points going into the DC plan. *The Patriot-News* quotes Greg Mennis of Pew to the effect that the revisions to SB 1 would improve benefits by “about 10%.”

http://www.pennlive.com/midstate/index.ssf/2015/08/latest_gop_pension_offer_gets.html#incart_river

⁹ If the prior benefit was 30% of the Act 120 benefit and improves 10% it would be 33% of the Act 120 benefit, a cut of 67% or two thirds.

¹⁰ William B. Fornia and Nari Rhee, *Still a Better Bang for the Buck*, National Institute on Retirement Security; online at http://www.nirsonline.org/storage/nirs/documents/Still%20a%20Better%20Bang/bangforbuck_2014.pdf

¹¹ For example, the average total contributions to the 3.4 million Vanguard DC plans in 2013 (the latest year available) was 10.2% and the median contribution was 9.2%. The average employer match was 4.1% and the median 3%. (Vanguard, *How America Saves 2014: a report on 2013 Vanguard defined contribution plan data*, Figure 1, p. 5 and Figure 7, p. 14.) The Fidelity average employer match was similar – 4.3 percent – which would add up to 10.3% if combined with a 6% employee contribution. Andrea Coombes, “Bigger 401(k) match trumps bigger salary,” <http://www.marketwatch.com/story/bigger-401k-match-trumps-bigger-salary-2014-08-12>

¹² If you assume a 4% CB plan rate of return, as Pew does in some of its estimates, then the SB 1 benefit is 11% to 12% lower than with the a private 401(k)-style plan.

¹³ Keith Brainard and Alex Brown, *The Annual Required Contribution Experience of State Retirement Plans, FY 01 to FY 13*, National Association of State Retirement Administrators, http://www.nasra.org/files/JointPublications/NASRA_ARC_Spotlight.pdf

¹⁴ Jeffrey H. Keefe, *Public Versus Private Pension Costs in Pennsylvania*, Economic Policy Institute, Washington D.C.; online at <http://keystoneresearch.org/sites/keystoneresearch.org/files/EPIBriefingPaper313.pdf>

¹⁵ Motoko Rich, “Teacher Shortages Spur a Nationwide Hiring Scramble (Credentials Optional)” *The New York Times*, August 9, 2015; online at

http://www.nytimes.com/2015/08/10/us/teacher-shortages-spur-a-nationwide-hiring-scramble-credentials-optional.html?_r=0

¹⁶ In 2014, Pennsylvania had 7,019 education majors at PASSHE schools; online at <http://www.passhe.edu/FactCenter/Pages/student.aspx>. This compares with over four times as many (29,221) in 2003: Bill Schackner, “Spending Cuts Loom at Pennsylvania’s 14 State-owned Universities, *Pittsburgh Post-Gazette*, August 18, 2013, online at <http://www.post-gazette.com/stories/news/education/spending-cuts-loom-at-pennsylvanias-14-state-owned-universities-699767/>

¹⁷ Keystone Research Center, “Senate Proposal Goes Backwards, Not Forwards, On Pensions: SB 1 does nothing about pension debt, deeply erodes retirement security, and will end up costing taxpayers,” KRC Pension Primer #12, Harrisburg, June 3, 2015, online at <http://keystoneresearch.org/pensions>

¹⁸ For additional discussion of ways to reduce taxpayer risk while maintaining Pennsylvania’s DB pensions, see the last section of Stephen Herzenberg, “Moving Backwards on Pension Reform: Tobash Plan Does Little to Reduce Pension Debt But Will Erode Quality of Public Schools and Services, Hurt Retirement Security,” KRC pension primer #9, Keystone Research Center, Harrisburg, June 2, 2014; online at <http://keystoneresearch.org/issues-guides/pensions>